

GCCCCAGGGCCTGGAGAGGTCTGAAAGAAACCTGGAGGCCAGCAGCCCGGGGCTCACTCTGGGTTCTGAAAGCCCATTC 79
 CCTGCTCTGGGGCTCTTCCACCCCACTCTTCTCAGCCCTTCAGCTCAAGGGTTGATCTCAGGAGTCCAGGACCCAGG 158
 AGAGGGAAGAATCTGAGGAACACAGAACAGTGAAGCCTTCCACACCCCATCTCCCTCACCACATCTCCCTCACCCT 237
 CACCCTCCCTGCTGGCCCTGGACCCCATCCAGGACCTCCCTATCAGCTGACTTCTTCAGTGTCTTTCAGGCCCCCTC 316
 TGGGCTCCTCCCTCCCTGGCTTTCTTACCCTCCCTCTATCGGCTCTATCTGTAGGTGCCCTGGGATTTATAAA 395
 ACTGGGTTCCGAATGCTGAATAAGAGACGGTAAGAGCCAGGCAAGGACAGCACTGTTCTCTGCTCCCTGATACCT 474

 CACCACCTGGGAACATCCCCAGACACCTCTTAACTCCCGGACAGAG M A G G A W G 7
 ATG GCT GGC GGA GCC TGG GGC 543

 R L A C Y L E F L K K E E L K E F Q L L 27
 CGC CTG GCC TGT TAC TTG GAG TTC CTG AAG AAG GAG GAG CTG AAG GAG TTC CAG CTT CTG 603

 L A N K A H S R S S S G E T P A Q P E K 47
 CTC GCC AAT AAA GCG CAC TCC AGG AGC TCT TCG GGT GAG ACA CCC GCT CAG CCA GAG AAG 663

 T S G M E V A S Y L V A Q Y G E Q R A W 67
 ACG AGT GGC ATG GAG GTG GCC TCG TAC CTG GTG GCT CAG TAT GGG GAG CAG CGG GCC TGG 723

 D L A L H T W E Q M G L R S L C, A Q A Q 87
 GAC CTA GCC CTC CAT ACC TGG GAG CAG ATG GGG CTG AGG TCA CTG TGC GCC CAA GCC CAG 783

 E G A G H S P S F P Y S P S E P H L G S 107
 GAA GGG GCA GGC CAC TCT CCC TCA TTC CCC TAC AGC CCA AGT GAA CCC CAC CTG GGG TCT 843

 P S Q P T S T A V L M P W I H E L P A G 127
 CCC AGC CAA CCC ACC TCC ACC GCA GTG CTA ATG CCC TGG ATC CAT GAA TTG CCG GCG GGG 903

 C T Q G S E R R V L R Q L P D T S G R R 147
 TGC ACC CAG GGC TCA GAG AGA AGG GTT TTG AGA CAG CTG CCT GAC ACA TCT GGA CGC CGC 963

 W R E I S A S L L Y Q A L P S S P D H E 167
 TGG AGA GAA ATC TCT GCC TCA CTC CTG TAC CAA GCT CTT CCA AGC TCC CCA GAC CAT GAG 1023

 S P S Q E S P N A P T S T A V L G S W G 187
 TCT CCA AGC CAG GAG TCA CCC AAC GCC CCC ACA TCC ACA GCA GTG CTG GGG AGC TGG GGA 1083

 S P P Q P S L A P R E Q E A P G T Q W P 207
 TCC CCA CCT CAG CCC AGC CTA GCA CCC AGA GAG CAG GAG GCT CCT GGG ACC CAA TGG CCT 1143

 L D E T S G I Y Y T E I R E R E R E K S 227
 CTG GAT GAA ACG TCA GGA ATT TAC TAC ACA GAA ATC AGA GAA AGA GAG AGA GAG AAA TCA 1203

 E K G R P P W A A V V G T P P Q A H T S 247
 GAG AAA GGC AGG CCC CCA TGG GCA GCG GTG GTA GGA ACG CCC CCA CAG GCG CAC ACC AGC 1263

 L Q P H H H P W E P S V R E S L C S T W 267
 CTA CAG CCC CAC CAC CAC CCA TGG GAG CCT TCT GTG AGA GAG AGC CTC TGT TCC ACA TGG 1323

 P W K N E D F N Q K F T Q L L L L Q R P 287
 CCC TGG AAA AAT GAG GAT TTT AAC CAA AAA TTC ACA CAG CTG CTA CTT CTA CAA AGA CCT 1383

 H P R S Q D P L V K R S W P D Y V E E N 307
 CAC CCC AGA AGC CAA GAT CCC CTG GTC AAG AGA AGC TGG CCT GAT TAT GTG GAG GAG AAT 1443

 R G H L I E I R D L F G P G L D T Q E P 327
 CGA GGA CAT TTA ATT GAG ATC AGA GAC TTA TTT GGC CCA GGC CTG GAT ACC CAA GAA CCT 1503

 R I V I L Q G A A G I G K S T L A R Q V 347
 CGC ATA GTC ATA CTG CAG GGG GCT GCT GGA ATT GGG AAG TCA ACA CTG GCC AGG CAG GTG 1563

FIG. 1A

F	H	L	Y	L	I	P	S	D	C	S	I	R	K	E	L	E	L	C	Y
TTC	CAC	CTC	TAC	CTG	ATC	CCA	AGT	GAC	TGC	TCC	ATT	CGS	AAG	GAA	CTG	GAG	CTC	TGC	TAT
																			4323
R	S	P	G	E	D	Q	L	F	S	E	F	Y	V	G	H	L	G	S	G
CGA	AGC	CCT	GGA	GAA	GAC	CAG	CTG	TTC	TGG	GAG	TTC	TAC	GTT	GGC	CAC	TTG	GGA	TCA	GGG
																			4383
I	R	L	Q	V	K	D	K	K	D	E	T	L	V	W	E	A	L	V	K
ATC	AGG	CTG	CAA	GTG	AAA	GAC	AAG	AAA	GAT	GAG	ACT	CTG	GTG	TGG	GAG	GCC	TTG	GTG	AAA
																			4443
P	G	D	L	M	P	A	T	T	L	I	P	P	A	R	I	A	V	P	S
CCA	GGA	GAT	CTC	ATG	CCT	GCA	ACT	ACT	CTG	ATC	CCT	CCA	GCC	CGC	ATA	GCC	GTA	CCT	TCA
																			4503
P	L	D	A	P	Q	L	L	H	F	V	D	Q	Y	R	E	Q	L	I	A
CCT	CTG	GAT	GCC	CCG	CAG	TTG	CTG	CAC	TTT	GTG	GAC	CAG	TAT	CGA	GAG	CAG	CTG	ATA	GCC
																			4563
R	V	T	S	V	E	V	V	L	D	K	L	H	G	Q	V	L	S	Q	E
CGA	GTG	ACA	TGG	GTG	GAG	GTT	GTC	TTG	GAC	AAA	CTG	CAT	GGA	CAG	GTG	CTG	AGC	CAG	GAG
																			4623
Q	Y	E	R	V	L	A	E	N	T	R	P	S	Q	M	R	K	L	F	S
CAG	TAC	GAG	AGG	GTG	CTG	GCT	GAG	AAC	ACG	AGG	CCC	AGC	CAG	ATG	CGG	AAG	CTG	TTT	AGC
																			4683
L	S	Q	S	W	D	R	K	C	K	D	G	L	Y	Q	A	L	K	E	T
TTG	AGC	CAG	TCC	TGG	GAC	CSG	AAG	TGC	AAA	GAT	GGA	CTC	TAC	CAA	GCC	CTG	AAG	GAG	ACC
																			4743
H	P	H	L	I	M	E	L	W	E	K	G	S	K	K	G	L	L	P	L
CAT	CCT	CAC	CTC	ATT	ATG	GAA	CTC	TGG	GAG	AAG	GGC	AGC	AAA	AAG	GGA	CTC	CTG	CCA	CTC
																			4803
S	S	*																	
AGC	AGC	TGA																	
																			1430 4812
AGT	A	T	A	C	A	C	A	C	C	C	T	T	G	A	C	C	T	T	G
																			4891
CA	A	G	T	T	G	C	A	T	C	T	G	G	T	T	T	G	C	T	T
																			4970
G	C	C	A	G	G	S	A	T	G	C	C	A	G	G	G	G	G	G	C
																			5049
C	C	T	G	C	A	G	A	C	T	C	A	T	A	G	A	G	C	C	T
																			5128
A	G	G	A	A	T	A	G	G	G										

FIG. 1D

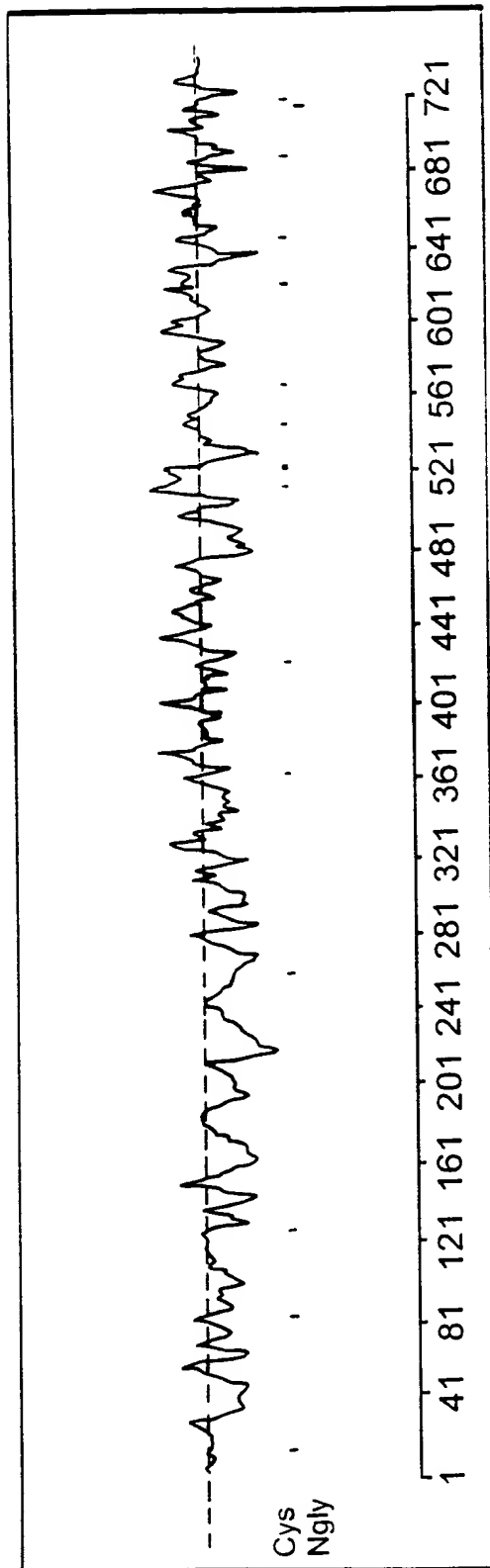


FIG. 2

200 400 600 800 1000 1200

A B T C A B T

4.5 0 -4.5

4.5 0 -4.5

• • F

1.7 0 -1.7

6 1

200 400 600 800 1000 1200 1400

Alpha, Regions - Garnier-Robson
Beta, Regions - Garnier-Robson
Turn, Regions - Garnier-Robson
Coil, Regions - Garnier-Robson
Alpha, Regions - Chou-Fasman
Beta, Regions - Chou-Fasman
Turn, Regions - Chou-Fasman
Hydrophilicity Plot - Kyte-Doolittle
Hydrophobicity Plot - Kyte-Doolittle
Alpha, Amphipathic Regions - Eisenberg
Beta, Amphipathic Regions - Eisenberg
Flexible Regions - Karplus-Schulz
Antigenic Index - Jameson-Wolf
Surface Probability Plot - Emrini

FIG. 3

TGCCAATGTGTGAGCATTTGCTTTGTTGAGCTTTTTTTTTTCAAGACAGGGTCTCAACTCTGTTACCCAGGCTGGAGT	4058
GCAGTGGTGCGATCTCAGCTCACTGCCAACCTCTGCGCTCTCGTTCAAGCGATTATTGTGCGCTCAGCGCTCCTGAGTAGCT	4137
GGGATTACAGGCATGCACCACCACAGCCCGAGCTAATTTTTGTTATTTTAGTAGAGACAGAGTTTTGCTATTGTTGGCCA	4216
GGCTGGTTTTGAACTCTGCGGCTCAAGTGATCCACCCACCTCAGCGCTCCCAAAGTGCTGGGATTACAGGCCACTACACC	4295
TGGCACATTTGAGTATTTTTTTTTTTTTTTTTTTGAGATGGAGTCTCGCTCTGTCTATCTAGGCTGGAGTGCAGTGG	4374
TGTGATCTCAGCTCACTGCAGCGCTGTGTCTCCGGGCTCAAGCGATTCTCTTGCCTCAGCGCTCCTGAGTAGCTAGGACT	4453
ACAGGTGCATGCCAACAGCGCCCGGCTAATTTTTTAAAAAATATTTTTAGTAGAGACAGGGTTTCACCATTTTGCCAG	4532
GATGGTCTCGATCTCTGACCTCATGATCCACCGGCTCGGCTTCCAAAGTGCTGGGATTACAGGCATGAGCCACCGT	4611
GCCTGGCGCTCATTTGAGTATTTTATAATGTCTCTTTTAAAGTCTTTGTGAGATAATTCCACTGTACATGTTATTCAGT	4690
GTTTGGTGTCCACTGAGTTGTCTATTGCCAGACAAGTGGAGATTTTGCAGCTCATCTTTGTTATCTCAGTAGTTCGA	4769
TATGTACCCTCGACATGTGAATGTTATCTTATGAGACTCTGTTTTATTGTATCCAACAGAAGATGTTTATTATTATT	4848
TGGCTTTCTGTGAACTGAGGTCTTAATATCAGCTCATTTTAAAGTCTTTGAGTGGTATTGGGATCTATCTGTGTGT	4927
GCCTATGAGATTGGGTGCAGTGATCTCTGTTAGCTCCATTCTCAGGGCGTTTGAATGTGAATTAGGACCAGCGCAATGA	5006
ATGCTCAAGTTGGGGTTGGGCGTTAGAATTCATAAAAGTCTTTATATGTCTCAG	5059

FIG. 4C

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CARD8 P P F S G A - A F V K E N H R Q L Q A R M G D - - - L K G V L D D L Q D N E V L T E N E K E L V E
CARD7 L D A P Q L L H F V D Q Y R E Q L I A R V T - - S - V E V L D K L H G - Q V L S Q E Q Y E R V -
ASC S A A K P G L H F I D Q H R A A L I A R V T - - N - V E W L L D A L Y G - K V L T D E Q Y Q A V -
APAF1 M D A K A R N C L L Q - H R E A L E K D I K T S Y - - - I M D H M I S D G F L T I S E E E K V -
CARD4 E S - H P H I Q L L K S N R E L L V T H I R N T Q C L - - - Y D N L L K N D Y F S A E D A E I V C
CASP1 M A - - - D - K V L K E K R K L F T R S M G E G T - I N G L L D E L L Q T R V L N K E E M E K V K
RICK I A - Q Q W I Q - - - S K R E D I V N Q M T E A - C L N Q S L D A L L S R D L I M K E D Y E L V S

CARD8 Q E K - T R Q S K N E A L L S M V E K K G D L A L D V L F R S I S E - R D P Y L - V S Y L - R
CARD7 L A E N T R P S Q M R K L F S L S Q S W D R K C K D G L Y Q A L K E - T H P H L - I M E L - - W
ASC R A E P T N P S K M R K L F S F T P A W N W T C K D L L L Q A I R E - S Q S Y L - V E D L E R S
APAF1 R N E P T Q Q Q R A A M L I K M I L K K D N D S Y V S F Y N A L - - L H E G Y K D L A A L L H D
CARD4 - A C P T Q P D K V R K I L D L V Q S K G E E V S E F F L Y L L Q Q L A D A Y V D I R P W L L E
CASP1 R E N A T V M D K T R A L I D S V I P K G A Q A C Q I C I T Y I C E - E D S Y L - A G T L - G L
RICK - T K P T R T S K V R Q L L D T T D I Q G E E F A K V I V Q K L K D N K Q - - M G L Q P Y P E I

```

Fig. 7

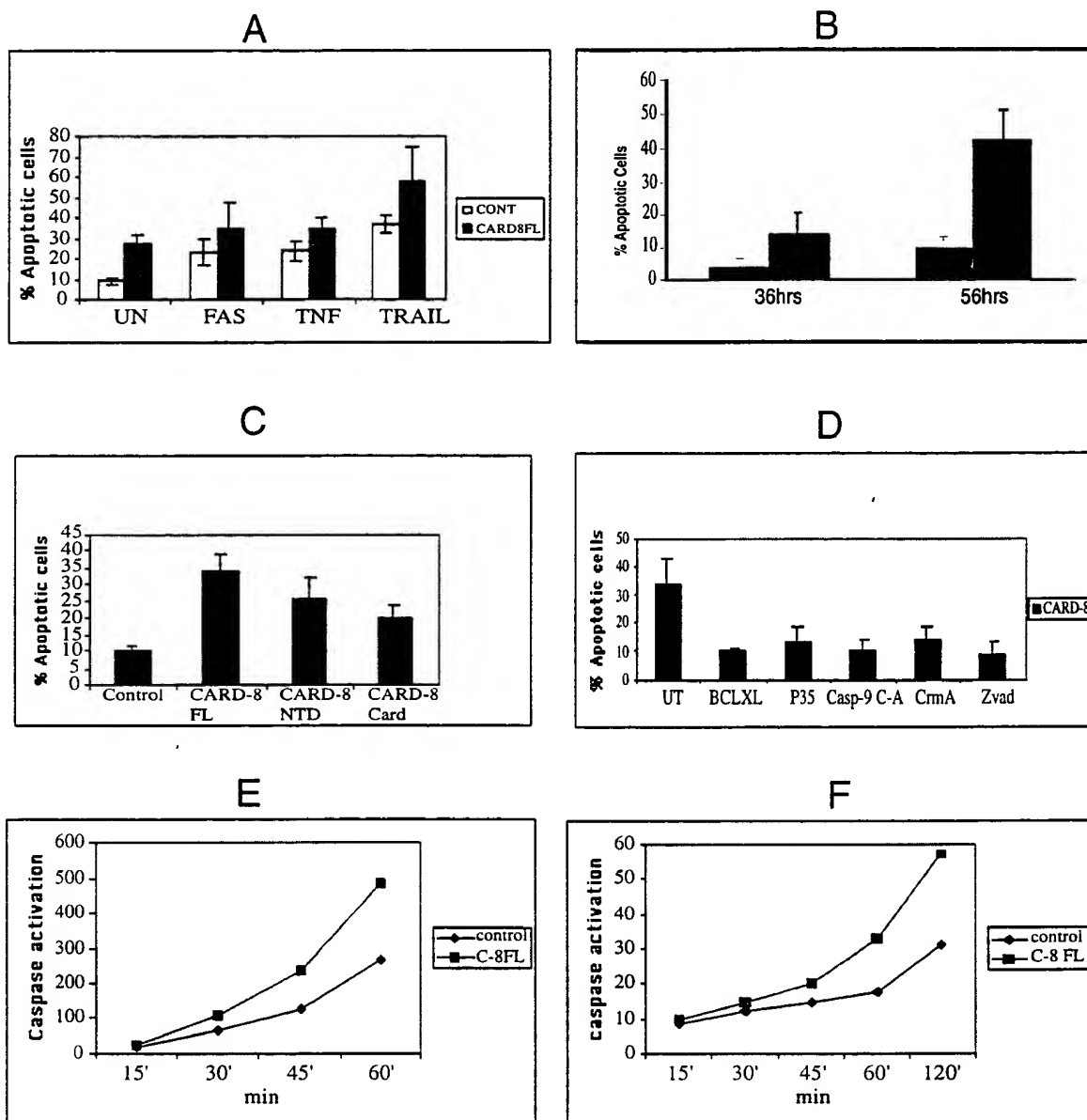


Fig. 8

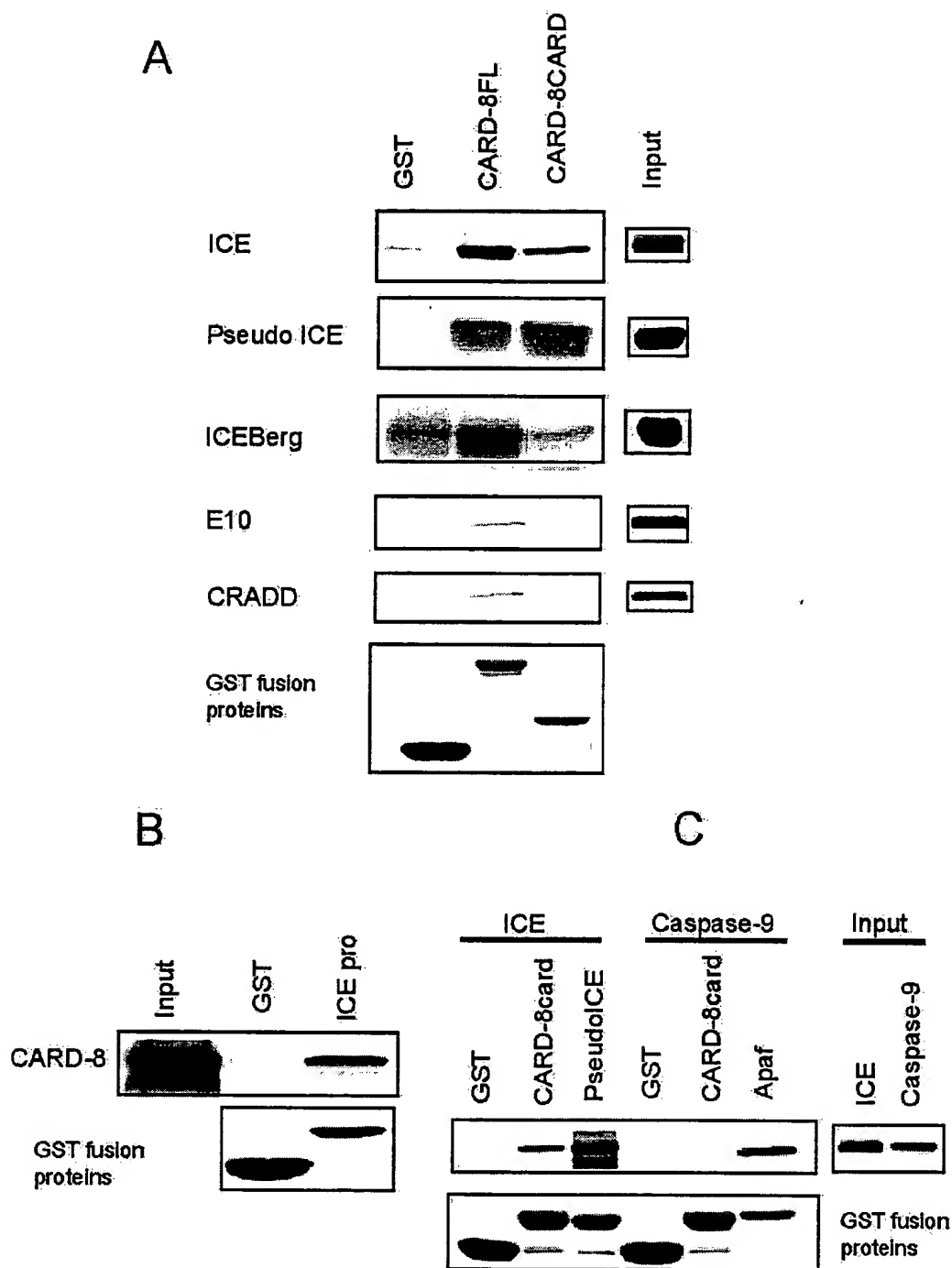
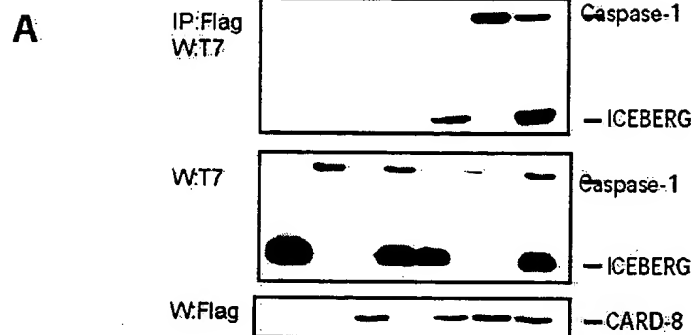


Fig. 9

T7 ICEBERG	+	-	-	+	+	-	+
T7Caspase-1 C-A	-	+	-	+	-	+	+
Flag CARD-8	-	-	+	-	+	+	+



T7Pseudo ICE	+	-	-	+	+	-	+
T7Caspase-1 C-A	-	+	-	+	-	+	+
Flag CARD-8	-	-	+	-	+	+	+

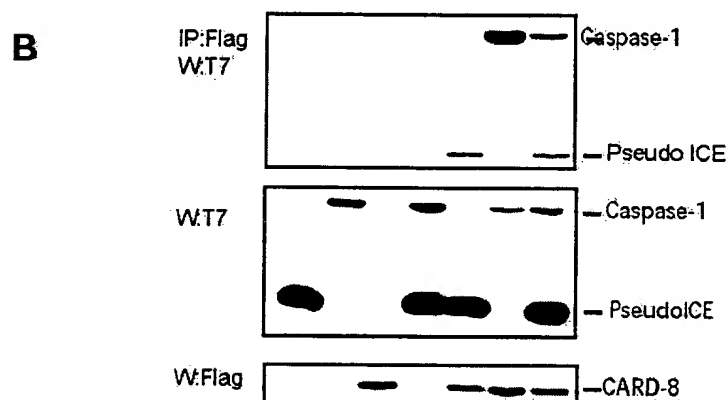


Fig. 10

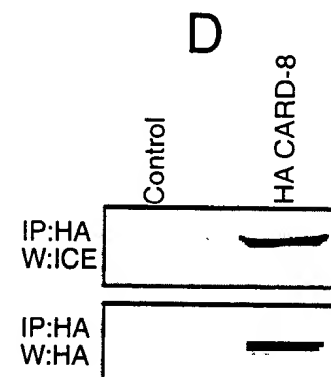
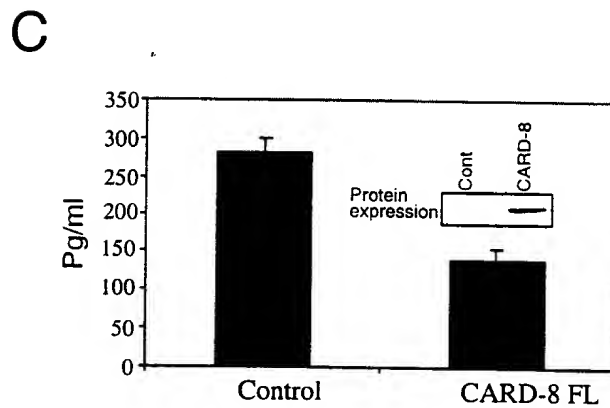
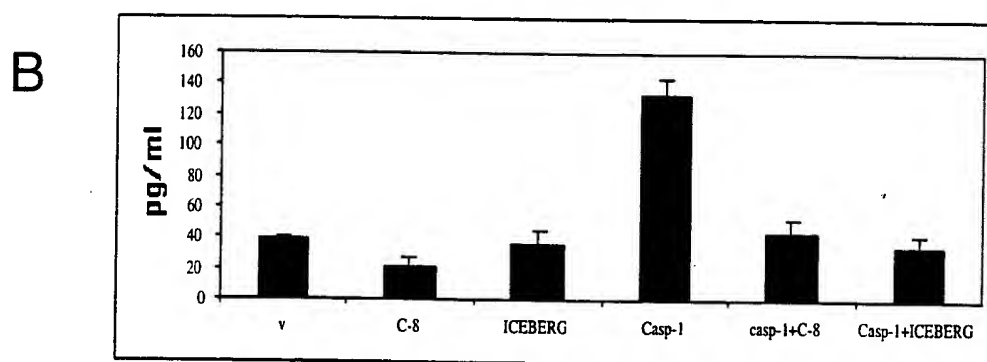
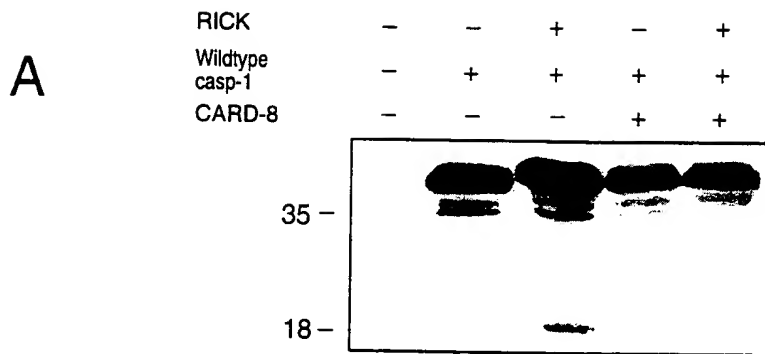


Fig. 11